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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,071	05/09/2001	Mark K. Branson	Z1154/01101	3527

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LOUISVILLE, KY 40202

EXAMINER
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NEWHOUSE, NATHAN JEFFREY

ART UNIT	PAPER NUMBER
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3727

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/852,071

Applicant(s)

BRANSON ET AL. *CH*

Examiner

Nathan J. Newhouse

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6, 8, 10, 12-15 and 17-23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Uhlig (US 3,917,097).

See column 9, lines 14-47 describing the opening the child resistant closure and container. As the (F-1)lug/finger engages the locking lug/projection 15a only one time during removal, the thread pitch can not be less than the axial height of the locking lug multiplied by the number of locking lugs.

With respect to claims 3, 4, 13, 14 and 19-20, the threads 17, 25 having thinner start and finish ends as shown in the figures. These may be one of the first or second thread segments with the other being the middle, thicker portion of the thread. Depending upon which are the first and second thread segments of the threads 17, 25 results in the claimed relationship. For example, in claim 4, the first segment is

considered the thread start or finish end that is thinner than the second segment or middle segment of the thread.

3. Claims 1-4, 6, 8, 12-15 and 18-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones et al. (US 6,279,766).

Jones et al. teaches a child resistant closure and container wherein the threads of the closure and container are tapered as shown in the figures. The closure has a locking lug 20 that engages with a locking lug 5 on the shoulder 4 of the container neck. The closure is squeezed once to disengage the locking lugs 20 with the locking lug 5. See column 6, lines 12-25.

With respect to claims 4 and 19, the thinner, first thread segment is the top, tapered end on the container neck, and the second, thicker thread segment is the middle portion of the thread on the neck.

With respect to claims 6 and 20, the thinner, second thread segment is at the end of the tapered thread of the container neck (adjacent the shoulder 4), and the first, thicker thread segment is the middle of the thread.

With respect to claims 12-15, the closure has a matching thread structure to the container that is described above in reference to claims 4, 6 above.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

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subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uhlig (US 3,917,097).

Uhlig discloses the claimed invention except for thickness of the thinner and thicker segments of the thread being 0.025 and 0.057 inches respectively, the height of the locking lug being 0.123 inches and the thread pitch being 0.25 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the thread segments of Uhlig such that the thinner segment is 0.025 and the thicker segment is 0.057 inches, the height of the locking lug is 0.123 inches and the thread pitch is 0.25 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

6. Claims 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uhlig (US 3,917,097) in view of Virog Jr. et al. (US 4,180,175).

Uhlig teaches everything except for the thread being a double helix type. Virog Jr. et al. teaches a similar child resistant threaded closure and container wherein the thread is a double helix type which allows for easier removal/less time as the rotation angle through which the closure must be turned for removal is smaller. It would have been obvious to one of ordinary skill in the art at the time the invention was made

to make the threads of Uhlig a double helix as taught by Virog Jr. et al. to allow for easier, quicker removal.

7. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (US 6,279,766).

Jones et al. discloses the claimed invention except for thickness of the thinner and thicker segments of the thread being 0.025 and 0.057 inches respectively, the height of the locking lug being 0.123 inches and the thread pitch being 0.25 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the thread segments of Jones et al. such that the thinner segment is 0.025 and the thicker segment is 0.057 inches, the height of the locking lug is 0.123 inches and the thread pitch is 0.25 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

8. Claims 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (US 6,279,766) in view of Virog Jr. et al. (US 4,180,175).

Jones et al. teaches everything except for the thread being a double helix type.

Virog Jr. et al. teaches a similar child resistant threaded closure and container wherein the thread is a double helix type which allows for easier removal/less time as the rotation angle through which the closure must be turned for removal is smaller. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the threads of Jones et al. a double helix as taught by Virog Jr. et al. to allow for easier, quicker removal.

9. Claims 1-3, 6-8, 10-11, 18-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (US 5,533,633) in view of Jessup (US 3,233,769).

King teaches a container neck with a thread having a thicker thread segment 30, and a thinner thread segment 32 and a locking lug 18. King further teaches a corresponding threaded closure having a locking lug 20 to engage the container. King does not teach the pitch of the thread and the height of the locking lug being such that upon one rotation the locking lugs can no longer engage.

Jessup teaches a similar threaded closure and container having mutually engaging locking lugs to form a child resistant container. Jessop further teaches that the pitch of the threads and height of the locking lugs is such that upon one rotation, the locking lugs can no longer engage. See column 3, lines 34-40. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the pitch of the threaded container and closure of King and the axial height of the locking lugs as taught by Jessup such that upon one rotation the locking lugs no longer engage so that the child resistant locking means needs to only be defeated once in order to open the container.

With respect to claims 7 and 11, the combination as set forth discloses the claimed invention except for thickness of the thinner and thicker segments of the thread being 0.025 and 0.057 inches respectively, the height of the locking lug being 0.123 inches and the thread pitch being 0.25 inches. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the thread segments of King such that the thinner segment is 0.025 and the thicker segment is

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0.057 inches, the height of the locking lug is 0.123 inches and the thread pitch is 0.25 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Response to Arguments***

10. Applicant's arguments with respect to claims rejected under 35 USC 102(b) as being anticipated by Uhlig have been considered but are not found persuasive. Applicant states that the thread of Uhlig has rounded ends (applicant's amendment, page 10). Clearly, then the thread of Uhlig is thinner at these rounded ends than at the rest of the thread. These meets the limitations as set forth of a thread having first and second thread segments with one of the segments being thicker than the other.
11. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the



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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, "should be directed to the group clerical personnel and not to the examiners. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information without contacting the examiners", M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer Service at (703) 306-5648, email [CustomerService3700@uspto.gov](mailto:CustomerService3700@uspto.gov).

Any inquiry concerning the merits of the examination of the application from the examiner should be directed to Nathan J. Newhouse whose telephone number is (703)-308-4158. The examiner can normally be reached on Monday-Thursday 7:00-5:00.

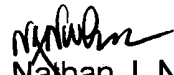
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lee W. Young can be reached on (703)-308-2572. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9302 for regular communications and (703)-872-9303 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1148.

Other helpful telephone numbers are listed for applicant's benefit.

Allowed Files & Publication	(703) 305-8322
Assignment Branch	(703) 308-9287
Certificates of Correction	(703) 305-8309
Drawing Corrections/Draftsman	(703) 305-8404/8335
Fee Increase Questions	(703) 305-5125
Intellectual Property Questions	(703) 305-8217
Petitions/Special Programs	(703) 305-9282
Terminal Disclaimers	(703) 305-8408
Information Help line	1-800-786-9199
Internet PTO-Home Page	<a href="http://www.uspto.gov">http://www.uspto.gov</a>

  
Nathan J. Newhouse  
Primary Examiner  
Art Unit 3727

April 21, 2003